

California GARDEN

10c



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APRIL
1938

Sumacs Three

Frank F. Gander

How Weather
Forecasts Are Made

Dean Blake

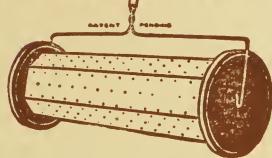
The Acacia Season

K. O. Sessions

Aboriginal Use of
Medicinal Plants

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Garden Problems

By R. R. MCLEAN

Question: A four year old pepper tree in my yard seems to be dying, the leaves are quite brown. Prior to the freeze it was very beautiful. The yard is dobe and not well drained. The tree was blown down twice during the rough weather but was well staked up again. Do you think the roots have rotted or will it recover in time?—G. W.

Answer: A well-rooted 4-year-old pepper tree, especially if growing in heavy soil, should not have blown down even in the windiest weather of the present season. It is probably true that, due to poor drainage, the root system has suffered severely even to the rotting of some of the lower roots. This would weaken the tree to such an extent that it might blow over in a moderate wind. Without actually seeing the tree it would seem that the only hope of recovery is to remove some of the top to balance the loss of roots. If it is well staked or braced and considerable care is used not to over-irrigate this spring and summer so that no water will stand around the roots there is probably a chance of its recovering. If you will scrape the bark of the trunk and larger limbs with a knife or chisel you can determine if the cambium layer, underneath the

(Continued on page 8)

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•
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Sumacs Three . . .

By FRANK F. GANDER, NATURAL HISTORY MUSEUM

While there are many fine shrubs in our chaparral which are well worthy of places in our gardens, but few of them are more deserving of such usage than are the three large sumacs, the Laurel Sumac (*Rhus laurina*), the Sugar Berry (*R. ovata*), and the Lemonade Berry (*R. integrifolia*), which range from the Tehachapi Mountains to the southern tip of the Sierra San Pedro Martir in Baja California. Throughout most of the coastal and brush lands of this area, one or more of these three shrubs forms a conspicuous part of the natural vegetation. They all grow in large rounded clumps, often twelve or fifteen feet in height, or occasionally as small, round-topped trees. Their glossy, simple leaves are very different from those of eastern sumacs.

The Laurel Sumac is perhaps the least desirable of the three as it is easily damaged by frost and not quite so drouth desistant as the other two. It has its good points, however, as it is a very rapid grower; its leaves are a fresh green color and are yellowed by summer's drouth only in quite arid situations, and the new leaves are as gloriously colored as are those of the camphor tree. The tiny, creamy yellow flowers are borne in large clusters and appear in late spring. The berries are inconspicuous but form an important winter bird food. This sumac likes a good soil best but will do quite

well on hard, stony hillsides. The foliage has a pungent aroma which to most people is very pleasing. The plant is aided rather than hurt by summer watering.

The Sugar Berry is a shrub of the mountains and comes to the coast only in a few places, as in Mahogany Canyon in East San Diego. It has long been cultivated in Balboa Park where it does well when given the same care as other cultivated shrubs. However, it can stand almost any amount of drouth without losing its attractive greenness, and apparently blooms more freely when left dry in summer. It does not grow as rapidly as the Laurel Sumac, but it can stand the coldest winters of our mountains, where its green leaves glisten above the snow all winter long. In late winter, short, stout spikes of dark pink buds appear, and these are followed in early spring by lovely clusters of small pink flowers. The leaves are delightfully fragrant. This is a fine shrub for landlords to plant, if they can not trust their tenants to water the shrubbery regularly.

Of the three, the Lemonade Berry has perhaps the most good qualities. While in the wild it is found only in the coastal section, it will stand a fairly severe frost without damage. Its spring-like greenness is not dimmed by even the driest summer. This is one shrub which seems to have quite catholic tastes so far as soils are concerned:

it grows on the beach in almost pure sand, it grows on the edge of marshes where its roots reach down to salt water, it is abundant on adobe soil where the ground is often saturated with water for months at a time, it does very nicely in the loamy soils of the canyon floors, and it reaches its best development on the moist north slopes of our coastal hills. Its pretty pink flowers open in February or earlier, and the sour red berries to which it owes its name appear in late spring and early summer. The berries of both this and the Sugar Berry make a pleasantly acid drink when allowed to soak for a short time in water.

If you have a corner of your yard to which it is difficult to get water, try one of these sumacs, and after a year or two to allow the roots to penetrate deeply, let it have only what water the seasons bring. Not only will you save yourself much trouble, but you will also save on the water bill. And you will have an attractive green shrub throughout the year. Most large dealers stock the Lemonade Berry at all times; they have the Sugar Berry part of the time, and the Laurel Sumac can be obtained, as a rule, only from those dealers who specialize in native plants.

The communication of the Pan-American Society of Tropical Research published in last issue should have carried the following address:
Gulfport, Mississippi.

How Weather Forecasts Are Made

DEAN BLAKE, WEATHER BUREAU

Recently we were asked to prepare a talk on "The Mystery of Weather Forecasting." Weather forecasting is no mystery; it is accomplished only through study and hard work. The most proficient forecasters are those with the most experience; those who have the greatest amount of observational material at hand to work with, and who best understand how to use it.

To concentrate its activities, the country has been divided into six forecast districts with centers at Washington, D.C., Chicago, New Orleans, Jacksonville, Denver and San Francisco. At each of these centers carefully selected men, into whose hands have been placed all available data, issue forecasts every 12 hours for the entire district. Only the officials at regular Weather Bureau stations have the authority to modify them, and then only for their particular locality.

The observations upon which the predictions are based are made near the same time as possible, and are sent from all parts of the North American continent and the surrounding oceans. They are transmitted by radio, telegraph, telephone and teletype. Among the data received are the daily soundings of the upper air made by airplanes carrying instruments and recording air pressure, temperature and humidity; surface weather conditions over sea and land; and the wind direction and velocity for all levels to 17,000 feet.

As the observations are received, they are decoded and entered on maps, which, when completed, give the forecaster the location of the high and low barometric areas, the vertical distribution of temperature and moisture, the direction and force of the air streams aloft, and all pertinent information at each of the reporting stations. Having this picture before him, he attempts to visualize what it will be 36 or 48 hours later.

In general, areas of high baro-

metric produce clear, cool weather, and areas of low barometer windy, rainy weather. Cold waves, blizzards and frosts are always accompanied by intensely high pressures, and storms and floods by energetic low pressures. Thus forecasting is, in a word, the predicting of the direction of movement and velocity of areas of high and low pressure, and of their effects in the areas over which they are to pass.

Unfortunately, however, there are no hard and fast rules governing their movements, and where, during one forecast period, a storm will move 400 miles, during the next it may either remain stationary or materially increase its speed. Frequently, too, storms will form shortly after the predictions are sent out, and resulting conditions will be the opposite of those indicated at the time of the reports.

On the Pacific coast particularly, forecasting presents many problems. The outstanding one is lack of adequate reports from ships at sea. Most of our weather changes have their origin over the Pacific ocean. Often there are areas as large as the entire United States from which no reports are available. Often the data are received incorrectly, being "garbled" in transmission. Because most vessels ply the great circle routes to the Hawaiian Islands and the Far East, there is a concentration of reports along these lanes, and a dearth elsewhere. Many times high and low pressure centers are fixed by the observation received from a single vessel hundreds of miles away.

In spite of the fact that the ultimate aim of all science is prediction, weather forecasting is not a science but an art. It has been possible, it is true, to lay down certain rules covering the movements of barometric areas, but they depend on data which it is impossible to collect or apply over the ocean where there are no fixed stations

save at a few widely scattered islands.

Considering the inadequate number of reports received, particularly from over the ocean, and the paucity of the data necessary for a correct analysis of the weather map, no apology is tendered for the mistakes which occur. Under the methods employed by the Weather Bureau, and there are no better in use anywhere at the present time, perfect forecasts are impossible all of the time. But even with their imperfections, millions of dollars are saved annually. The predictions of frost in southern California is an example of their value, and if we consider the hurricane warnings on our southern coasts, the cold wave warnings of the interior, and the flood forecasts in the great river basins, it is readily seen that the Bureau saves many times it cost in its forecasting service alone.

Native Garden Dedicated

As a fitting climax to Conservation Week our Society dedicated the Native Garden in Balboa Park. Under the direction of Mr. Morley, Superintendent of the Park, and Mrs. Greer and Miss Sessions, and in the presence of the Board, the location of the garden was established and the first plantings made. Miss Sessions donated several species of Ceanothus and when the first plant was set, Mrs. Greer paid tribute to Mr. Morley for his cooperation in selecting the site and to Miss Sessions who has campaigned so long for the establishment of such a garden.

The garden is located just off the road that branches from Pershing Drive opposite the 7th green. Mr. Morley has built a road leading into a clearing and the site seems ideal, for already there is quite a nice selection of plants growing. When you visit the site take some wild flower seeds along and scatter them where you think they will make a showing. It won't be long before this garden will be one of the outstanding features of the Park.

Garden Strolls With the Editor

The aloes have been unusually bright this year. *Aloe frutescens*, a familiar parking plant with its clusters of star-fish like leaves and fiery red tubular flowers. Should have more species in my garden with the cacti and other succulents. They say to visit South Africa when the aloes bloom is worth the long trip.

My agave should be blooming in a year or two. How old is it now, eight or nine years? "Century plant" is a misnomer. Might make some pulque from it when the bud appears. Quite a drink in Mexico. Looks and smells like buttermilk.

Ought to have more species of palms in the background for my cactus garden. That is a queer one David Fairchild tells about, the *lodoicea*. Its fruit weighs forty pounds and looks like two coconuts grown together. Takes thirty years for the tree to flower and ten years from the time the fruit sets till it is ripe. Guess I won't get impatient after this when I plant flower seed.

There's a beautiful Spanish tile bench in an inviting setting—which invites "sitting." Placed where two walks meet to provide an object of interest.

Lilies should be blooming soon. Think I'll pot some Easter lilies next year. I like the green-stemmed giganteum the best. Certainly have had luck with my gold-banded lilies since I learned they must not have too rich a diet. Would like to see them growing native on the slopes of Fujiyama. Ought to have more native California lilies. In variety of native lilies California ranks next to Japan. Wonder what the flower-loving people of Japan think of this Chinese conquest?

Should have an all native California shrub group on my sunny canyon side. Got the idea at our Native Garden dedication the other day. Have a start with the soft blue *ceanothus* and the California holly. *Manzanita* makes a fine cultivated shrub. Name means "little

apple." Pretty those Spanish names. Could have the *matilija* poppy. Certainly ought to be appreciated in its own state as much as it is in England. And I could have a *parkinsonia*; nothing quite so graceful.

An early *jacaranda* showered with blue and violet. Flowers effective against the fern-like foliage. One of my favorites. Wish my orchid tree would grow faster. That one in the park is one of the showiest trees there. So is that coral tree near it. Tropics ablaze with them in certain regions.

Glads seem to be coming back. *Glad-i-o-lus*. Accent still on the "o" I guess. Latin, "small sword." Name from sword-like leaves. Native to the Mediterranean region and South Africa. Especially abundant in the Cape region. The list of bulbs from there is long. *Ericas* also plentiful. Nine-tenths of the five hundred species are native to South Africa. Should have more in cultivation. *Heather* of literature is another genus, *Calluna*, which is from the Greek, "to sweep." Used for brooms at one time. Wish I could afford Bailey's "Hortus."

Seems to be South African day. There's that orange *gazania*. Native to the Cape. *Leonitis* also from there. What a show it would be to plant *gazania* at the base of the tawny *leonotis*.

Orange tones go well with a Spanish casa. Warm. *Chorizema* brilliant orange show. Clever little pansy-shaped flowers. Holly leaf. Specific name, *ilicifolia*, means holly leaved. Combines well with Darwin's barberry. Days getting longer. More time to work in the garden.

OUTSTANDING PLANT OF THE MONTH

In keeping with the spirit established by Conservation Week we have selected *Ceanothus cyanus* as the feature plant of the month. This native lilac of Lakeside was introduced to cultivation by Miss Sessions and is so characteristic of our section that we feel it deserves top ranking at this time. Do you agree?

March Meeting

At the March meeting of the San Diego Floral Association, three days after Conservation Week, and the birth of the Native Plant Garden in Balboa Park, the speakers for the evening gave talks relative to conservation and native plants.

Mr. Albright talked on preparation for growing flowers for the next flower show, giving informative suggestions for using liquid fertilizer and in bringing out branches and flowers, one of the quickest ways.

Mr. R. R. McLean's talk, as usual, and like the articles frequently given in California Garden by him was brimful of information for all floral-minded persons. He said, "Insect control vitally concerns conservation." Reading excerpts from "Mexican Plants for American Gardens," Mr. McLean recommended it as one of the finest and most interesting late books on plant life. Two plants therein mentioned are the climbing palms and climbing bamboos.

Mr. Shoven explained briefly the plan in the drive for new members. Fifteen members as captains were chosen and services assigned them.

Miss Sessions was happy to commend the Floral Association for the splendid effort contributed in securing the Native Plant Garden in Balboa Park. She gave an interesting discussion of many specimens of native flowers and shrubs.

Mrs. Larson of Encinitas urged all who can, to see the fields of *runculus*, *anemone* and *leucocoryne* near Oceanside during the remainder of this month.

A generous donation of chrysanthemum plants from the Arthur Marston garden for distribution was given the club. —G. M. G.

APRIL MEETING

Dr. Anita Muhl, who has just returned from a world trip, will be the speaker at the next meeting. Dr. Muhl took flower notes and will tell us about foreign gardens that interested her. Come prepared to see some lovely pictures of unusual gardens.

ABORIGINAL USE OF MEDICINAL PLANTS IN SOUTHERN CALIFORNIA

By GEORGE F. CARTER
Curator of Archaeology
San Diego Museum
Teaching Assistant—Geography
San Diego State College

It is generally known that so famed a medical specific as quinine, and so useful a drug as cocaine had their inceptions in American Indian discoveries. However, it is not generally known that the Indians of this region also contributed to our medical knowledge by the discovery of cascara. Such, nevertheless, is the case. From the bark of the Cascara Sagrada, also known as Pidgeon berry or California coffee (*Rhamnus californica*), they prepared a laxative which the padres found to be of such great merit that they speedily adopted its use. In Northern California cascara bark is today harvested in quantities for world wide distribution, and this native contribution has become recognized as one of the world's best laxatives. Although quinine, cocaine, and cascara are outstanding examples of this branch of aboriginal knowledge, they serve only as an introduction to the wide field of Indian pharmacology.

The Indians of Southern California are of two distinct stocks. The Yuman peoples, comprising the Northern and Southern Diegueno, Kamia, and Yuma, held the territory roughly south of the San Luis Rey river and eastward to the Colorado river. They represent an earlier stock. North of the San Luis Rey river, are the Shoshonean tribes known as the Luiseno, Cupeno, and Cahuilla. They represent the point of a wedge of later peoples who expanded from the great basin country south westward to reach the coast in this vicinity. Typical of both groups was a wide range of movement in search of food, the lack of domesticated plants and animals (except the dog), and a great dependence on wild seeds. The peoples along the desert border in particular had a tremendous variety of plants within their migrational reach, a variety reflected in both food and medicinal plants.

Due to the above factors and the proximity of these peoples to each other, they tended to make very similar use of medicinal plants. For this reason no attempt will be made in this paper to distinguish plant usages as to tribe.

The exact method of preparing many of the plants has not been given by the authors on this subject. However, a study of the known procedures reveals that normally some part of the plant was boiled, steeped, or soaked to produce a fluid with the desired medicinal properties. The resulting liquid was drunk, used as a wash, or applied as a liniment, as the needs of the case required.

In primitive cultures the gathering of wild plant foods was generally the woman's work, but the knowledge of drugs and medicines was often concentrated into the hands of the shaman. In Southern California, however, medical knowledge seems to have been rather generally distributed throughout the group. Greatest medicinal knowledge seems to have belonged to the old men and women, but only by virtue of longer and wider experience.

To a large extent these remedies were applied mainly to the more common and understandable ills of those people. Obscure ills and often obvious ones, were treated by the shaman. His method included blowing smoke on the affected part, songs, and incantations. In contrast to these methods, however, was the treatment based on plants. These were more in the nature of household remedies. They were common knowledge and not the special prerogative of any person or group.

One generally conceives of the Indian as a very healthy person. Previous to the coming of the European diseases, and previous to the decay of the primitive culture, this concept was at least fairly true. The rigorous, out-door, active life of the Indian tended to eliminate weaklings. Nevertheless, there was much sickness amongst the Indians. Some sicknesses were incidental, and some were consequent

(Continued on page 8)

Spring Work for Fuchsias

By BERTHA N. THOMAS

They are now throwing out large healthy branches—getting a good start for their summer work of blooming and if you have been negligent in the needed pruning while they were dormant it will still help wonderfully if you will, right now, today—get busy, and at least prune out probably half of the lateral growth. The plant always throws out more than is needed for its own best health and the blooms will be larger, and more brilliant if there is not an over abundance of them and quality is here desired as much as numbers yes, very much more. Of course one can prune cautiously at any time and should, if the Fuchsia shows too much wood or if sympathy demands it. But always remember how shallow the roots grow and do not dig around them—gently loosen the top soil—fertilize often, every 2 weeks seems to fit their needs—mulch heavily, and water every day during growing season. Naturally you will see that these suggestions apply to plants grown in the open. One who has them in containers in lath houses will vary the treatment to suit conditions and if one is a real plant lover any plant will "speak" plainly enough to inform you what it wants—or does not.

Most Fuchsias will speak 100 per cent for full shade but will also accomodate themselves to almost anything. I believe we have previously mentioned that since Fuchsias are mostly native to tropical Americas, they grow naturally in the sun but the luxuriant growth around them shelters the roots from the heat, but there are very few Fuchsias which do not doubly repay the trouble of giving them full shade. Or if they must of necessity accept sun (especially our special California brand) in addition to good mulching, plant in front of them some low growing sheltering shrubs, perhaps one foot in height.

Just now our ground is moist but they soon will need a drenching every day, at the roots, and also a

sprinkling of the foliage. If they are properly pruned—fertilized—and watered, they will not get red spiders or thrips, although thrips are now so plentiful on some other things, that we have a problem. If you had those little pests last summer you will save much trouble if you remember they hibernate on the bark, so get out your antiseptics now and kill them before the warm weather brings them out. They are also a little choosey about their hosts, that is, they do not attack some of the Fuchsias, the heavier leafed varieties are usually free.

Our Fuchsia Society President, Mrs. Ware of San Francisco, is urging our northern city people to have "at least one Fuchsia in every yard." We also could if we would. But why not do more, that is, put also a Poinsettia in, better still, a full dozen. The Fuchsias for the shade, the Poinsettias for the sun, and you know their climate doesn't call for the latter favorites of our southland.

But every year sees so many new importations and new seedlings in our Fuchsia family that we can have any color—any shade—and size of both plant or bloom. If your space is not large, pick out the small kinds, I suspect we would get at least twenty. Then if your neighbors can have the glorious big ones, you can each have both kinds, one to possess, the other to look at, but I am warning that no one can start growing Fuchsias, without wanting to possess them all. There are so many oddities among them, even the leaves of so many varieties are variegated that every color has been appropriated by some one of them.

Fred Jackson sends a note that this is just the time to run a reminder of the new Novice Dahlia Sweepstakes prize.

Do you grow Dahlias?

Have they never won a prize?

If so, you are eligible for the Novice Dahlia Sweepstakes at our Dahlia Show next August.

You may show any 5 large Dahlias that you have grown.

Better begin to prepare now!

The Acacia Season

By K. O. SESSIONS

Acacia podolycraefolia has finished its bloom—November to February is its season, and is setting its seed pods and looking quite shabby. The remedy is to prune it once, cutting it back from 1 to 3 feet all over the tree depending on age and size of the plant. At once new growth begins and soon all is in fine fresh foliage and by summer is full of buds for the next season's flowers. All acacias hold their buds dormant for a long time.

By February Acacia Baileyana is showing its great yellow plumes and always on the north side of the tree first. Its beauty lasts for 2 to 2½ months, then its seed pods begin to form. The same remedy follows, cutting back 3 to even 5 feet all of the branches, depending on the size of the tree. Every acacia variety needs the same treatment, a heavy pruning directly following the blossoming season each year.

There are a few summer bloomers, also fall, and one ever-bloomer, *Acacia florabunda*. It should be pruned in the late fall so it will make its new growth during the winter while the many other varieties are in bloom.

This variety is a small grower and flourishes near the coast but not by the shore. That position will do well for *Acacia latifolia* which is a strong growing shrub—stands heavy pruning and makes an excellent large hedge, placing the young plants 6 to 10 feet apart. Such a hedge makes a good shelter for gardens near the coast. *Acacia pruninosa* is a large grower and fall bloomer, its fern-like foliage with brown tints being very beautiful.

Acacia prominens is a very tall grower and its main and central stem is like a large telephone pole. The foliage is a simple leaf, flowers rather light yellow and choice. Its fine erect and rapid growth makes it a desirable variety for a new garden to be placed in the background.

Small growing acacias are each year more in demand, and *A. line-*

aris, *A. lineata*, and *A. decora* are all excellent. *A. decora* grows only about 3 feet high, a choice and dainty small shrub.

The blackwood acacia, commonly planted on streets, is *A. melanoxylon*. At this time they are full of seed pods and need a heavy pruning all over.

Every acacia needs a good stake when planted and placed on the leeward side so the tree will lean against it; and the branches should grow longer on the windward side, and help to hold the tree and main central stem erect. All kinds of seedling trees will grow erect without staking because by nature their branches grow longer into the wind and their extra weight holds the main stem and tree erect. A small plant with a straight central stem can be made to grow erect by nipping the tip ends off on all branches on the leeward side. All larger growing trees should be planted when very small for best results.

Poinsettia Pointers

The poinsettia plants that are well established close to the house, wall or lot line can be improved by planting an irregular group or a row of *Myrtus communis* or *coprosma* plants in front, set out at least 2 to 3 feet and 3 or more feet apart. These shrubs stand trimming well as they grow and they will hide the bare stems and heavy trunks of the old poinsettia plants trimmed back in February and looking bare until June.

If new poinsettia plants are being planted, place them at the back of good evergreen shrubs—but allow for ample root development. Old plants have many branches, so some thinning out and transplanting in March will give excellent results.

A generous planting of your own cuttings in the rear yard or garden will give an abundance of flowers for cutting and save those in the front as long as the season lasts. Everyone enjoys using this flower generously—so grow them more abundantly each year.

—K. O. Sessions.

31st Annual Spring Flower Show

Fri. and Sat., April 30th and May 1st

OPEN SAT., 1 P. M., BALBOA PARK—MAIN PLAZA

SCHEDULE OF CLASSES

SECTION A—AMATEURS

ROSES

- * 1. Collection of Roses, 25 Varieties, two blooms each. (Association cup).
- * 2. Collection of Roses, 12 varieties, two blooms each.
- * 3. Collection of Roses, 6 varieties, two blooms each.

NOTE: No person may exhibit in more than one of Class 1, 2, 3.

- 4. Six White Roses, one variety.
- 5. Six Red Roses, one variety.
- 6. Six Yellow Roses, one variety.
- 7. Six Yellow Shaded Roses, one variety.
- 8. Six Pink Roses, one variety.
- 9. Six Pink Shaded Roses, one variety.
- 10. Six Flame Colored Roses, one variety.
- 11. Six Multicolored Roses.
- 12. Three White Roses, one variety.
- 13. Three Red Roses, one variety.
- 14. Three Yellow Roses, one variety.
- 15. Three Yellow Shaded Roses, one variety.
- 16. Three Pink Roses, one variety.
- 17. Three Pink Shaded Roses, one variety.
- 18. Three Flame Colored Roses, one variety.
- 19. Three Multicolored Roses.
- 20. One White Rose.
- 21. One Red Rose.
- 22. One Yellow Rose.
- 23. Yellow Shaded Rose.
- 24. One Pink Rose.
- 25. One Pink Shaded Rose.
- 26. One Flame Colored Rose.
- 27. One Multicolored Rose.
- 28. Display of Single Roses.
- 29. Display of Polyantha or Baby Roses.

30. Display of Old Fashioned Roses.

31. Display of Climbing Roses.

32. Arranged Vase or Bowl of Roses. One variety.

33. Arranged basket of Roses. One variety.

34. Arranged Vase or Bowl of Roses. More than one variety.

35. Arranged basket of Roses, more than one variety.

BEST ROSE IN SHOW

SECTION B—AMATEURS BEARDED IRIS

36. Arranged Basket of Bearded Iris.

37. Arranged Bowl of Bearded Iris.

38. Arranged Vase of Bearded Iris.

39. Arranged Low Dish of Bearded Iris.

BULBOUS IRIS

(Dutch, Spanish or English)

40. Arranged Basket of Bulbous Iris.

41. Arranged Bowl of Bulbous Iris.

42. Arranged Vase of Bulbous Iris.

43. Arranged Low Dish of Bulbous Iris.

44. Arranged Bowl of Japanese Iris.

BEARDLESS IRIS

45. Arranged Basket of Beardless Iris.

46. Arranged Bowl of Beardless Iris.

47. Arranged Vase of Beardless Iris.

48. Arranged Low Dish of Beardless Iris.

* 48. Arranged Bowl of Flowers in Shades of Yellow.

* Sweepstakes Trophy 36.48 inclusive.

COLLECTIONS

- 49. Collection of five distinct named varieties of Bearded Iris.
- 50. Collection of ten distinct named varieties of Bearded Iris.
- 51. Collection of twenty distinct named varieties of Bearded Iris.
- 52. Collection of five distinct varieties of Beardless Iris.
- 53. Collection of ten distinct varieties of Beardless Iris.
- 54. Collection of twenty distinct varieties of Beardless Iris.
- 55. Collection of five varieties of Bulbous Iris.
- 56. Collection of ten varieties of Bulbous Iris.
- * Sweepstakes Trophy 49-56 inclusive.

SECTION C—AMATEURS SWEET PEAS

- * 57. Collection Sweet Peas, 10 stems each vase.
- 58. Vase Sweet Peas, White.
- 59. Vase Sweet Peas, Cream and Yellow Shades.
- 60. Vase Sweet Peas, Red and Red Shades.
- 61. Vase Sweet Peas, Pink and Pink Shades.
- 62. Vase Sweet Peas, Lavender and Blue Shades.
- 63. Vase Sweet Peas, Purple and Maroon Shades.
- 64. Vase Sweet Peas, Salmon and Orange Shades.
- 65. Vase Sweet Peas, Bi-Color. Classes 54-61 inclusive should carry ten to fifteen stems each vase.
- 66. Arranged Bowl of Sweet Peas
- 67. Arranged Basket Sweet Peas

- * SWEEPSTAKES, San Diego Floral Association Bronze Medal.

SECTION D

Amateurs

FLOWER ARRANGEMENTS

- 68. Arranged Basket of Flowers other than Roses, Sweet Peas or Iris.
- 69. Arranged Bowl of Flowers in Shades of Yellow.
- 70. Arranged Bowl of Flowers in Shades of Pink or Rose.

- 71. Arranged Bowl of Flowers in Shades of Lavender and Blue.
- 72. Arrangement of Flowers in Vase or Bowl.
- 73. Arranged Bowl of White Flowers.
- 74. Arrangement of Flowers in Copper, Brass, Pewter or Silver Container.
- 75. Flower Arrangement on Mirror.
- 76. Arrangement of Green Material in White Container.
- 77. Flower arrangement in Sea Shell.
- 78. Formal arrangement of Flowers in Victorian Manner.
- 79. Arrangement of Flowers in a Chinese Bowl or Jar, Accessories Allowed.
- 80. French Bouquets.
- 81. Arrangement of Fruit.
- * Sweepstakes in Classes 68-81 inclusive. First and Second Prizes.
- * 81a. Still Life Pictures in Shadow Boxes.

SECTION E

Amateurs

MISCELLANEOUS

- * 82. Miniature Arrangements. Four inches over all. Limit three entries.
- * 83. Miniature Arrangements, seven inches over all. Limit three entries.
- * 84. Tea Tables.
- * 85. Breakfast Tables.
- * 86. Dining Tables.
- 87. Individual Specimen of Decorative Plant.
- 88. Cut Specimen Flowering Vine.
- 89. Cut Specimen Flowering Shrub.
- 90. Collection of Bulb Flowers, six or more varieties.
- 91. Display of Gladioli.
- 92. Display of Pansies.
- 93. Display of Violas.
- 94. Display of Delphinium.
- 95. Display of Petunias.
- 96. Display of Stocks.
- 97. Display of Snapdragons.
- 98. Display of Calendulas.
- 99. Display of Larkspur.
- 100. Display of Fuchsias.
- 101. Display of any other Flowers not otherwise classified.

- * Sweepstakes Classes 87-101 inclusive.

SECTION F Open to All Competition

- *102. Display from Civic or National Organization.
- *103. Display of Native Shrubs and Flowers.
- 104. Rose Seedling.
- 105. Display of Epiphyllums in Bloom. (Phylo Cactus.)
- *106. Display of Cacti.
- *107. Display of Succulents.
- 108. Dish or Tray Garden.

SECTION G PROFESSIONALS

- 109. Display of Sweet Peas.
- 110. Display of Cut Roses.
- *111. Displayed Collection of Rose Bushes in Bloom.
San Diego Floral Association Silver Medal
- *112. General Display of Cut Flowers other than Roses or Sweet Peas.
- *113. Displayed Collection of Shrubs and Plants.
- 114. Display of Bulb Flowers.
- *115. Collection of Begonias, Ferns, and other Lathhouse Plants.
- 116. Rock Garden.
- 117. Garden Pottery.

SECTION H FLORIST ENTRIES

- *118. Best Arranged Basket, Bowl or Vase of Cut Flowers.
- *119. Dining or Banquet Table.
- 120. Best Corsage.
- * OUTSTANDING DISPLAY IN SHOW, San Diego Floral Association Silver Medal.
- * Classes in which Trophies are offered. Ribbons for first and second in all classes.

FLOWER SHOW CHAIRMEN
Roses—Mrs. Geo. Gardner. Phone Bayview 3778. Mrs. C. M. Hosmer. Hill. 1101.

Sweet Peas—Dr. and Mrs. T. K. Burton. H. 0839.
Iris—Mrs. Wendell Brant. Hill. 5373.

Arrangements in Baskets, Bowls and Vases—Pieter Smoor. Phone Main 4875. Mrs. John Nuttall, H. 3065 and Mrs. H. F. Tucker, H. 7154-W.

Still Life Pictures—Mrs. Esther

- Barney. Main 5508.
Annuals and Perennials—Mrs. E. W. S. Delacour. Phone Hill 4021.
Cacti and Succulents—Mrs. E.W.S. Delacour. Phone Hill. 4021. Mrs. Grace Trevey. H. 2011-J.
Miniatures—Miss Marion- Robin son. B.V. 3371.
Decorative Tables—Mrs. Lester Wright. H. 8248.
Clerking—Mrs. Elsie Case.
Nomenclature—Mrs. W. S. Rock well.
Secretary—Mrs. M. E. Ward. Phone Hill. 3132-J.
Gate Receipts—Frederick G. Jackson.
General Chairman—Mrs. M. A. Greer. Phone Hill. 1550-J.

SHOW RULES

1. ALL EXHIBITS MUST BE IN PLACE AND PROPERLY ENTERED BY 11 A.M. OF FIRST DAY OF THE SHOW SO THAT JUDGING MAY BE COMPLETED AND AWARDS MADE BEFORE OPENING. NO EXHIBITOR WILL BE ALLOWED TO BE PRESENT WHILE JUDGING IS GOING ON.
2. All entries must be in the hands of the Clerks by 10:30 A.M. of the first day of Show, Clerks will be on duty at 7:30 A.M. and entries will be received at any time between these hours.
3. All exhibits must be labeled with the correct names of the plants on white cards 2x3 inches, which will be furnished without charge. Names of exhibitors in competitive classes positively must not appear on exhibits until after awards have been made. (Entries in Class 102 excepted from this rule).
4. Exhibits are, from the commencement of the Show, under the jurisdiction of the Show Officials and no exhibit shall be removed before the close of the Show without the authority of the official in charge.
5. Entries will not be considered by the judges unless meritorious.
6. Exhibits can be entered in one class only.
7. The committee on awards is authorized to give suitable award for any meritorious exhibit not included in the Classes named.

8. Vases are loaned without charge for cut flowers in the competitive classes.
9. All pot plants must have been in the possession of the exhibitor at least three months; all other flowers and plants must have been grown by the exhibitor, except where used for arrangement.
10. Flowers in Arrangements must be arranged by exhibitor.
11. In classes where a given number of blooms is specified any excess or deficiency of count shall constitute cause for disqualification.
12. A Display is an arrangement for quality and artistic effect.
13. A collection is a variety of meritorious kinds brought together.
14. All vases, bowls, etc. belonging to exhibitors must be called for Monday morning not later than eleven o'clock.
15. Flower arrangements to be judged according to the following points:

Distinction	20 points
Relation to	
container	20 points
Color Harmony	20 points
Proportion and	
Balance	20 points
Condition of	
Material	20 points
100	

16. An Amateur is one who does not engage in horticulture or gardening for profit and who is not directly or indirectly connected with one who engages in horticulture or gardening for profit.
17. No professional or amateur directly connected with a professional shall enter an amateur class.
18. The Floral Association invites exhibits, however small, if meritorious. Exhibits of single specimens of flowers or plants will be duly considered. Special reservations of space may be made by telephone with Mrs. M. A. Greer, Hill, 1550-J. Where Exhibits are to be of any considerable size it is advisable to make reservations in advance.

NO FEE IS CHARGED FOR MAKING ENTRIES IN THIS SHOW.

Copies of the above schedule and rules may be obtained at all local seed stores.

Bulbous Plants

By THE MASTER GARDENER

Tuberous Begonias—The tuberous begonia is indeed a treasure for the shady spot. It prefers shade and will thrive where very few other flowers will grow, and its brilliant colors brighten up shady spots in an almost unbelievable manner. The culture is easy, provided the soil in which they are planted has an especially large quantity of humus, ample supply of plant food, good drainage, and that they receive plenty of water during dry weather. Tubers may be set directly out of doors as soon as the ground is warm, but it is easier and better to start them indoors. In planting, set the concave, or indented, side of the tuber up. Cover 1 to 2 inches out of doors, or barely level with the surface when planting in flat or pots. Set the plants an inch or two inches deep when transplanting to the open. If it is not convenient to start plants indoors, pot plants may be purchased from the nursery or florist, and planted in the bed.

Garden Problems

(Continued from inside cover)

bark, is green or brown. If still green the tree may recover. If a considerable portion is brown it is probably dying.

Question: Kindly tell me when I should take cuttings from a fig tree. The tree I want to get slips from has root knot I am told. Will this disease affect the cuttings?—Mrs. K.

Answer: It is not too late to take cuttings if it is done right away. After the new growth starts you will run some risk of failure. If the root knot disease you refer to is caused by root knot nematodes, they cannot affect the cuttings in any way. Nematodes only work on the roots, never on the aerial parts of plants, and hence cannot be transmitted by any part of the tree except the roots. Other types of nematodes affect aerial parts of

ABORIGINAL USE OF MEDICINAL PLANTS IN SOUTHERN CALIFORNIA

(Continued from page 4)

to their way of life. Common ills arising from their mode of life were those most successfully dealt with. These would include eye inflammation, stomach, intestinal, and bowel disorders, colds, and chest troubles, as well as the direct results of an active life such as cuts, bruises, and sores.

Inflammation of the eye was a common trouble. Cause for this is not hard to find. Smoky fires, even in the open, can readily irritate the eye. Imagine then the effect of long hours spent in huts whose ventilation consisted of a single hole in the top through which the smoke of the fire was meant to find its eventual and leisurely way. To obtain relief the usual method was to resort to an eye wash. The flowers of the wild buck wheat (*Eriogonum fasciculatum*), or the leaves of the chaparral broom (*Baccharis glutinosa*) were steeped to produce eye washes. The sap of *Solanum douglasii* is also reputed to have been used to relieve inflamed eyes.

Ed. Note: Mr. Carter continues his article next month.

plants, but not the one causing the so-called root knot disease.

Question: May I ask some questions about roses? When is the best time to plant? Should they be budded roses or not? When should they be fertilized and with what? How should the plants be handled when they are set out?

Mrs. K. L.

ANSWER: Potted bushes can be planted at any time if care is taken not to break the balls of earth around the roots when they are taken from the containers. Dormant plants can be set out from November and December on, depending upon when they can be secured. Although more dormant rose bushes are planted here in January and February than at any other time, the operation can be continued as long as dormant stock can be secured until the buds push out on the canes.

Experts state that roses which are naturally vigorous on their own roots

need not be budded. Most of the hybrid teas, state these men, and many of the climbers, do just as well on their own roots as when budded. The tea roses and weaker varieties in other classes or types should usually be budded on some good rootstock to secure vigor. As a rule the budded stock costs more because of the extra production expense involved. In practice, however, one should buy only strong, vigorous plants, no matter whether on budded or on own roots.

In the fertilization of roses, as with other plants, there is considerable difference of opinion. A middle-of-the-road course, which is always best for the average gardener to follow, is to fertilize each year with well-rotted barnyard manure or other organic fertilizer rich in nitrogen, such as that from chicken runs. A heavy mulch of fertilizer is applied in the fall, winter or early spring, or even in the early summer, to obtain good growth and well-cooled flowers.

General directions for planting roses may be given as follows: "The rose should be planted in a hole that will allow the roots plenty of room. It is a mistake to cramp the roots or to plant in a hole that has poor drainage. Any broken roots should be cut off and any suspicious galls should be entirely removed. The rose bush should be set down at the first fork so that the bud union will be covered. Tree roses should be planted at about the same depth as in the nursery, allowing for some settling. The soil should be firmed about each plant with the foot, but not enough to injure the roots. Watering at planting time is advisable. If a rose bush should arrive badly dried out, the whole bush should be left in water over night. * * * When the rose bush is dug in the nursery, part of its root system will be lost and therefore it is important to cut back the canes so that the roots will not have too much top to support until they have again established themselves. The nurseryman may have cut back the canes before shipping but in many cases pruning has to be done after planting. The canes should be cut back and thinned so that there will be about three canes six or eight inches long on a first-grade, two-year-old bush. All weak or slender growth should be taken out."

Question: Could you give me some information regarding poinsettia cuttings?

ANSWER: Poinsettias are natives of central Mexico, and were introduced into this country about the middle of the nineteenth century at the time when Joel Robert Poinsett was United States Minister to Mexico. They are best started as slips or cuttings in the location where they are to be grown, although they may be transplanted as rooted cuttings without difficulty. The cuttings should be of mature wood of the previous season's growth and for best results such cuttings should be thoroughly dried out before planting although this is not absolutely essential where the cuttings are of wood that is thoroughly mature. If started in open ground, a handful of coarse sand should be placed at the bottom of the cutting to insure good drainage and prevent decay.

Old established plants are best transplanted about the first of March or when the winter blooms have disappeared and the canes are fairly mature. They should be pruned back severely.

The pruning of established plants in the ground may also be done about this time, when the canes of the previous year's growth are somewhat mature. If individual flowers of great size and long stems are preferred, the laterals should be pruned back to within two or three buds of the main trunk of the plant. Longer pruning will result in larger plants with more blooms the next fall, but the blooms will be somewhat inferior and small in size in comparison with plants more severely pruned.

Old plants should be well watered and given ample fertilization during the summer months but should be dried off gradually in the late fall so that they may mature sound wood and

bloom well for Christmas. If heavy fertilization and watering are practiced well into the fall, it will delay winter blooming.

Question: I stored some gladiolus bulbs away last fall and when I went to plant them I found that they were covered with mealy bugs. Should they be treated before planting and with what?—J.D.L.

Answer: When gladiolus corms are stored they should first be thoroughly cleaned and then put away in a dry, well ventilated place. Due to the fact that thrips and mealy bugs are sometimes on the corms when they are lifted or may attack them in storage, some growers put them away in paper sacks, 100 or so to the sack, and add one ounce of flake naphthalene to each lot. The sacks are closed and the naphthalene allowed to remain for several weeks.

Gladiolus corms are also subject to certain fungous troubles and it is, therefore, safer to treat them before planting. The usual treatment is to soak them in a two to four per cent lime-sulphur solution heated to 125 degrees F. for one-half minute, or in a solution of 1 part formaldehyde to 120 parts of water for 30 minutes. Corrosive sublimate (bichloride of mercury) is also effective, using it at a strength of 1 part to 1000 parts of water, unheated, for an hour and a half. The commercial mercurial preparations, such as Semesan, Cerisan, etc., are also good for treating such diseases as scab, hard rot, etc.

QUESTION: Kindly tell me whether it is best to let oranges and grapefruit ripen on the tree or should they be picked before they are ripe and put in boxes to get thinner skins like lemons?

Mrs. E. F. K.

ANSWER: The longer oranges and grapefruit are left on the trees the sweeter they will be. When once picked no more sugar will be developed. In other words, they will never be any sweeter than they are when picked. This is not important with lemons, hence one reason for picking this fruit when fully developed, regardless of color, and putting it away in a dark place to "cure."

GARDEN CONTEST BLANKS READY

Once again we announce the garden contest. This competition we feel does a lot to stimulate interest in fine gardens and we are hoping this year to have a much larger entry list. The blanks are available at Dunning's Seed Store.

ALBRIGHTS'

No. 1 Rose Bushes
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Prize Dahlias

GLORIA STUART—Cream, orchid tips; SARI MARITZA—Burgundy red, tipped silver; THE CLOWN—Purple and white; SCARLET WONDER—Giant scarlet red; TALA BIRELL—Large orchid pink; LIPSTICK—Semi-cactus rich red, tipped pink; LIPSTICK—Semi-cactus rich red, tipped white CHALLENGER—Prize red; JOSEPH'S COAT—A new miniature, hardly two flowers alike on a plant. Your choice of any of the above, values to \$5 each, special per tuber

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The collection of the eight tubers for \$6.95.

No. 1	6 large flowering varieties, catalog value, \$2, special...	\$1
No. 2	6 pompon varieties, all different and all colors, for.	\$1

TUBEROUS BEGONIA

Large tubers of Camellia flowered doubles or Giant Ruffled singles, 6 colors, each	15¢
Hanging Basket type or Carnation flowered doubles, in 5 separate colors, each	20¢

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The 1938 All America Selections, other 1938 Novelties and the finest strains of all your old favorites.

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Petunia Salmon Supreme (*Highest Award*) Pkt. 35c
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Cal.*) Pkt. 25c

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Collection, 1 pkt. each of the above 5,
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RUSSEL LUPINES, The Flower Sensation of the
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Nierembergia Hippomanica, Dwarf Blue Saucer
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TIGRIDIA—MEXICAN SHELLFLOWER

These gorgeous summer flowering bulbs do splendidly in So. Calif., require the same culture as gladiolus. Plant Now. The following five are rare and lovely new varieties. Alba Grandiflora, pure white; Liliacea rosy crimson; Montezuma, very deep rose; Peach, deep peach pink.

(*The above varieties have brilliant spotted center*)
Le Geant, huge scarlet flowers with unspotted center. Prices, 20c each, \$2. per doz. 2 each of the 5 named, \$1.75. Brilliant Scarlet; Deep Orange; Canary Yellow, 15c each, \$1.50 dozen; two dozen for \$2.50. Special Tigridia Mixture, 6 for 60c, dozen \$1.

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Some of your gardening may be done in the evening when it is cool.

May we offer suggestions?

•
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